NELAC PT Data Reporting and Scoring FAQs

1. **How should I report quantitative results to my PT provider?**

   Laboratories should follow the provider's instructions which accompany the samples and report all quantitative results to no more than three (3) significant figures. The USEPA criteria document requires PT providers to report data to three significant figures. If a laboratory's result is reported to more than three significant figures, there is a possibility that the result will fall outside of the acceptable range resulting in unacceptable PT performance.

2. **How should I report results for an analyte that is not detected in a proficiency testing sample?**

   When reporting data for an analyte that is not detected, use "a less than (<) sign in front of the method detection limit (e.g. <10 ppb)." Due to EPA requirements, as a general rule do not report alpha characters (e.g. ND, BDL), as the result will not be evaluated. Results that are not evaluated are the same as not analyzing a PT sample for that analyte.

   NOTE: The laboratory is cautioned to use methods for the PT sample that are sensitive enough to meet data quality objectives for reporting PT data. At a minimum, the method chosen by the laboratory should have a detection limit that is equal to the lowest possible concentration for the analyte as listed in the NELAC PT Fields of Testing (FOT) tables. Preferably, the laboratory should use a method that has a detection limit that is one third of the lowest possible concentration for the analyte as listed in the NELAC FOT tables.

3. **How do PT Providers score detected analytes (analytes with assigned values not equal to zero)?**

   - When the reported value does not have a less than (<) or greater than (>) sign, the value is scored as ACCEPTABLE if it is inside or equal to the acceptance limits. The reported value is NOT ACCEPTABLE if it is either below the lower acceptance limit or above the upper acceptance limit.
   - When the reported value has a less than (<) sign (e.g. <5 ppb), it is only ACCEPTABLE if the lower acceptance limit has a value of zero and the reported range is entirely within the acceptance limits (e.g. 0 – 12 ppb). Reported values with a < sign are NOT ACCEPTABLE if the lower acceptance limit is above zero (e.g. 3 – 12 ppb)
   - When the reported value has a greater than (>) sign, the value is always scored as NOT ACCEPTABLE.

4. **How do PT Providers score non-detected analytes (analytes with an assigned value equal to zero)?**

   - If the reported value contains a less than (<) sign (e.g. <10 ppb), the reported value is scored as ACCEPTABLE.
   - If the reported value contains a greater than (>) sign, the reported value is scored as NOT ACCEPTABLE.
   - For all EPA WS and WP analytes, if the reported value contains alpha characters, the reported value is scored as NO EVALUATION.
   - For all non-EPA WS and WP analytes, if the reported value is zero, less than (<) a numeric value or any alpha indication of not detected, the reported value is scored as ACCEPTABLE.
   - Although reporting zero is not recommended by both the EPA and NELAC, to be consistent with the EPA National Standards Criteria Document, a result of zero is scored as ACCEPTABLE.
   - Results left blank are scored as NOT REPORTED.

5. **When a result is left blank on the report form to the PT Provider, how will the PT Provider report that to my Accrediting Authority?**

   The PT Provider should include the statement NOT REPORTED. This will indicate to an Accrediting Authority that no analysis was run for the analyte. Since the laboratories may choose the analytes for which they want accreditation, they may choose not to analyze for all the analytes included in the PT samples. There is no penalty for not analyzing an analyte unless the laboratory applied for accreditation and then decided not to report a result for the PT sample for that analyte to fulfill the semi-annual schedule requirement.

6. **What does NO EVALUATION and NOT REPORTED mean on the reports from the PT Providers and how are they different?**

   The NO EVALUATION statement indicates that the laboratory reported a result but not in a form that could be interpreted by the PT Provider. In the situation of NO EVALUATION, the Accrediting Authority should interpret this to mean that the laboratory did not participate in a required semi-annual PT study and therefore has not met the requirements of the NELAC standards.

   The NOT REPORTED statement means that the laboratory left the result field blank. The Accrediting Authority has the responsibility of confirming that no PT sample was required (i.e. the laboratory did not apply for NELAC accreditation for that analyte). If the lab did apply for the analyte and there was no PT result reported, then the AA may interpret this as not meeting the NELAC requirement of completing the required semi-annual PT schedule. (AA and laboratories may have other arrangements where the laboratory participates in inorganic PTs one month and organic PT another month.)

7. **What is the 30-day requirement for NELAC PT studies?**

   NELAP accreditation requires two sets of acceptable PT results. Section 2.7.2 states, "For initial accreditation or supplemental testing, the PT studies shall be at least 30 calendar days apart." Section 2.7.3 (Supplemental Studies) states, "These additional studies….shall be at least 30 calendar days apart." Section 4.1.4 (d) states, "When a laboratory initially requests accreditation, it must successfully analyze two sets of PT samples, the analyses to be performed 30 calendar days apart."

   To be compliant with the 30-day NELAC PT requirement, two PT studies must be analyzed. A laboratory can either participate in PT studies where the opening date of the second study is at least 30 calendar days after the closing date of the previous study or the laboratory's PT Provider can collect the dates of analysis and report the analysis dates to the laboratory's Primary Accrediting Agency. As with all NELAC requirements, it is the responsibility of the laboratory to demonstrate to it's AA that it is in compliance with the NELAC standards. This answer pertains only to the 1999 version of the NELAC standards.